

Claims

1. A vacuum cleaner comprising:

a floor-engaging portion having a first air inlet on the underside thereof;

an upright portion pivotally connected at its lower end to said floor-engaging portion;

a handle upstanding from the upper end of said upright portion and having a first end and a second end, said first end of the handle being detachably engaged with a formation on said upright portion;

a rigid tubular duct extending along the handle between a second air inlet at said first end thereof and an outlet disposed remote from said first end; and

an elongate flexible hose having a first end and a second end, the first end of the hose being connected to said outlet on said handle, wherein the cross-sectional area of the rigid tubular duct extending along the handle increases substantially from said second air inlet at said first end of the handle towards said outlet disposed remote from said first end of said handle, the rigid tubular duct having, at said first end of the handle, an elongate portion which has at least one of a transverse dimension and a cross-sectional area which is substantially uniform over its length.

2. A vacuum cleaner as claimed in claim 1, wherein:

the cross-sectional area of said duct in said elongate portion at said first end of the handle is 40-60% less than the cross-sectional area of said duct adjacent said outlet.

3. A vacuum cleaner as claimed in claim 1, wherein:

said duct in said elongate portion at said first end of the handle has a dimension, along a major transverse axis of said duct, which is at least 40% greater than the dimension along a minor transverse axis which extends perpendicular to said major transverse axis.

4. A vacuum cleaner as claimed in claim 3, wherein:

said major transverse axis extends between the front and rear of the cleaner when said handle is engaged with said upright portion of the cleaner.

5. A vacuum cleaner as claimed in claim 1, wherein:

said duct adjacent said outlet is substantially circular in section.

6. A vacuum cleaner as claimed in claim 1, wherein:

said formation on the upright portion of the cleaner comprises a socket arranged to receive said elongate portion at said first end of the said handle.

7. A vacuum cleaner as claimed in claim 1, further comprising:

a valve having a first inlet port connected to said first air inlet of the cleaner, a second inlet port connected to the second end of said elongate flexible hose, an outlet port connected to a dust separation device, and means for selectively connecting said outlet port to either said first or second inlet ports.

8. A vacuum cleaner as claimed in claim 7, wherein:

said valve comprises an actuator for causing the valve to connect said outlet port to said second air inlet of the cleaner when the handle is removed from the upright portion of the cleaner, said actuator causing the valve to connect said outlet port to said first air inlet of the cleaner when the handle is engaged with said upright portion of the cleaner.

9. A vacuum cleaner as claimed in claim 1, further comprising:

a catch that retains the handle in engagement with said upright portion of the cleaner against a resilient bias.

10. A vacuum cleaner as claimed in claim 9, further comprising:

a valve having a first inlet port connected to said first air inlet of the cleaner, a second inlet port connected to the second end of said elongate flexible hose, an outlet port connected to a dust separation device, and means for selectively connecting said outlet port to either said first or second inlet ports, wherein said valve is actuated, upon release of said catch, to divert suction from said first air inlet of the cleaner to said second air inlet of the cleaner.

11. A vacuum cleaner as claimed in claim 1, wherein:

said handle comprises an elongate tubular structure which is closed at said second end of the handle.

12. A vacuum cleaner as claimed in claim 11, wherein:

said tubular structure is shaped to provide a hand grip to be grasped by the user.